

In the Claims:

1. (Currently Amended) A method of designing a semiconductor circuit device, comprising the steps of:

generating first circuit data comprising information on a first circuit driven by a voltage from a first power system;

5 generating second circuit data comprising information on a second circuit driven by a voltage from a second power system different from the first power system;

obtaining cell data prestored in a storage medium and comprising information on a boundary circuit; and

generating boundary circuit connection information indicating that the boundary  
10 circuit is connected on a transmission path between the first circuit and the second circuit  
wherein the boundary circuit comprises a suppressing circuit for suppressing shoot-through current between the first circuit and the second circuit, said suppressing circuit including a logic circuit receiving an enable signal in a first state from one of said first circuit and second circuit which is ON for suppressing said shoot-through current between said first circuit and  
15 second circuit when the other of said first circuit and second circuit is OFF, and receiving an enable signal in a second state for enabling signal transfer between said first and second circuits when each of said first and second circuits are ON.

2. (Canceled)

3. (Currently Amended) A method of designing a semiconductor circuit device, comprising the steps of:

generating first circuit data comprising information on a first circuit driven by a  
5 voltage from a first power system;

generating second circuit data comprising information on a second circuit driven by a  
voltage from a second power system different from the first power system;

obtaining cell data prestored in a storage medium and comprising information on a  
boundary circuit; and

10 generating boundary circuit connection information indicating that the boundary  
circuit is connected on a transmission path between the first circuit and the second circuit

~~A method of designing a semiconductor circuit device according to Claim 1,~~

~~wherein the boundary circuit comprises a circuit for preventing circuit malfunction~~  
~~due to an indeterminate signal ~~current~~ between the first circuit and the second circuit when a~~

15 ~~power supply of one of the first circuit is OFF, and a power supply of the second circuit is~~  
~~ON off and another one of the first circuit and the second circuit is on.~~

4. (Currently Amended) A method of designing a semiconductor circuit device,  
comprising the steps of:

generating first circuit data comprising information on a first circuit driven by a  
5 voltage from a first power system;

generating second circuit data comprising information on a second circuit driven by a  
voltage from a second power system different from the first power system;

obtaining cell data prestored in a storage medium and comprising information on a  
boundary circuit; and

10 generating boundary circuit connection information indicating that the boundary  
circuit is connected on a transmission path between the first circuit and the second circuit

wherein the boundary circuit comprises a suppressing circuit for suppressing leakage current between the first circuit and the second circuit, said suppressing circuit including a logic circuit receiving an enable signal in a first state from one of said first circuit and second circuit which is ON for suppressing said leakage current between said first circuit and second circuit when the other of said first circuit and second circuit is OFF, and receiving an enable signal in a second state for enabling signal transfer between said first and second circuits when each of said first and second circuits are ON.

~~A method of designing a semiconductor circuit device according to Claim 1,~~

~~wherein the boundary circuit comprises a circuit for suppressing leakage current between the first circuit and the second circuit when one of the first circuit and the second circuit is off, and another one of the first circuit and the second circuit is on.~~

5. (Currently Amended) A The method of designing a semiconductor circuit device according to Claim 1, wherein the boundary circuit further comprises a circuit for level conversion between the first circuit and the second circuit.

6. (Currently Amended) The A-method of designing a semiconductor circuit device according to Claim 1, wherein the boundary circuit further comprises a protection circuit for protecting a transistor in the first circuit and/or the second circuit from electrostatic discharge.

7. (Currently Amended) A The method of designing a semiconductor circuit device according to Claim 1, wherein the first circuit data, the second circuit data, and the cell data are data for logic circuit design.

8. (Currently Amended) The A-method of designing a semiconductor circuit device according to Claim 1, wherein the first circuit data, the second circuit data, and the cell data are data for layout design.

9. (Currently Amended) The A semiconductor circuit device designed by a method of designing a semiconductor circuit device according to Claim 1.

10.-13.(Canceled)